

MENU

SEARCH

INDEX

DETAIL

1/1



JAPANESE PATENT OFFICE

## PATENT ABSTRACTS OF JAPAN

(11)Publication number: 08274224

(43)Date of publication of application: 18.10.1996

(51)Int.Cl.

H01L 23/36  
// H01L 23/473

(21)Application number: 07078584

(22)Date of filing: 04.04.1995

(71)Applicant:

(72)Inventor:

HITACHI LTD

WATANABE HIDEKI

KASAI KENICHI

NEZU TOSHITADA

HIDAKA HIROYUKI

YAMADA OSAMU

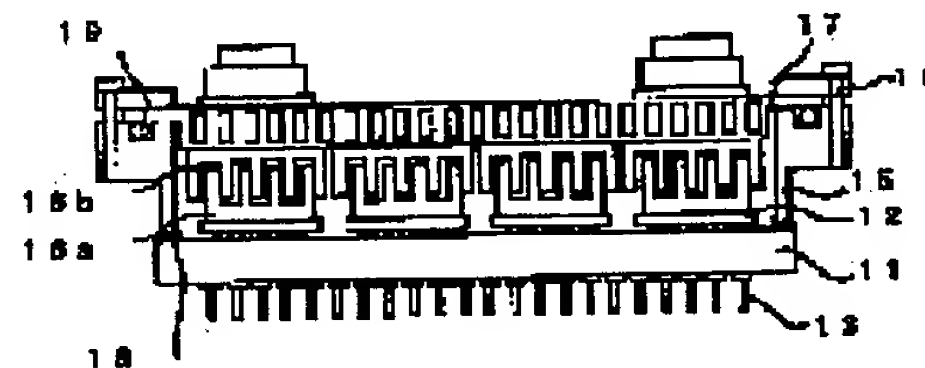
TAMURA MITSUNORI

## (54) SEALED COOLING STRUCTURE OF MULTICHIP MODULE

(57)Abstract:

**PURPOSE:** To provide a sealed cooling structure of a multichip module excellent in high density mounting, high sealed connection reliability, low manufacturing cost and high cooling performance.

**CONSTITUTION:** One side surface of a frame 15 which is matched with the thermal expansion coefficient of a wiring board 11 is connected with a surface of the wiring board 11 with solder on which surface a semiconductor device 12 is mounted. The other side surface is fixed on a lid member 17 which serves as a heat sink above the wiring board 11, through a packing 19, by using bolt fastening 10 or a means wherein total heating is not used.



LEGAL STATUS

[Date of request for examination] 20.08.1998  
[Date of sending the examiner's decision of rejection]  
[Kind of final disposal of application other than the  
examiner's decision of rejection or application converted  
registration]  
[Date of final disposal for application]  
[Patent number]  
[Date of registration]  
[Number of appeal against examiner's decision of  
rejection]  
[Date of requesting appeal against examiner's decision of  
rejection]  
[Date of extinction of right]

Copyright (C); 1998 Japanese Patent Office

[MENU](#)

[SEARCH](#)

[INDEX](#)

[DETAIL](#)